YEGOROV, N.S.; KORSHUNOV, V.V.

Conditions of antibiotic formation in Bacillus mesentericus cultures. Report No.2: Effect of hydrocarbon and nitrogen sources on antibiotic biosynthesis. Nauch. dokl. vys. shkoly; biol. nauki no.4:162-167 '59. (MIRA 12:12)

1.Rekomendovana kafedroy mikrobiologii Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(BACILLUS MESENTERICUS) (ANTIBIOTICS)
(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

KORSHUNOV, V.V.; YEGOROV, N.S.

Synthetic medium for the development of Bacillus brevis var.G.B. and the formation of gramicidin S. Mikrobiologiia 31 no.3:515-519 My-Je '62. (MIRA 15:12)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.
(GRAMICIDIN S) (BACTERIOLOGY—CULTURES AND CULTURE MEDIA)
(BACILLUS BREVIS)

KORSHUNOV, V.V.

Isolation and purification of Aspergillus terricola proteinase. Prikl. biokhim. i mikrobiol. 1 no. 6:653-657 N-D '65. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted June 15, 1965.

KORSHUNOV, V V

SHAPOSHNIKOV, V.N., akademik; YEGOROV, N.S.; KORSHUNOV, V.V.

Physiology of the amino acid metabolism in Bacillus brevis var. G.-B. Dokl. AN SSSR 148 no.5:1196-1198 F '63. (MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(AMINO ACID METABOLISM) (BACTERIA, AEROBIC)

IMSHENETSKIY, A.A., akademik; BROTSKAYA, S.Z.; KORSHUNOV, V.V.

Effect of the proteinase of molds on the blood thrombi. Dokl. AN SSSR 163 no.3:737-740 Jl '65. (MIRA 18:7)

1. Institut mikrobiologii AN SSSR.

1. VODZINSKII, Yu. V.; KORSHUNOV, Ya.

2. USSR (600)

4. Reduction, Electrolytic

7. Mechanism of electrolytic reduction of some aidehydes and ketones at a dropping mercury electrode in a neutral electrolyte. Zhur. fiz. khim. 27, No. 1, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, May 1953. Unclassified.

BAZER, Ya.L., inzh.; KORSHUNOV, Ya.V., inzh.; ZVEKOV, VA.

PNB-3 self-propelled loader. Gor. zhur. no.6:55-56 Je '62. (MIRA 15:11)

1. Gosudarstvennyy proyektno-konstruktorskiy i eksperimental'nyy institut ugol'nogo mashinostroyeniya (for Bazer, Korshunov).
2. Institut gornogo dela im. Skochinskogo, Moskva (for Zvekov).
(Mining machinery)

L 26152-66 EWT(1)/FSS-2 JKT

ACC NR: AN6014204 SOURCE CODE: UR/9008/66/000/010/0002/0002

AUTHOR: Korshunov, Ye. (Colonel general, Commandant) 30 B

ORG: none

TITLE: A time to search [Report by the Chief of the Military Command Academy of Anti-aircraft Defense]

SOURCE: Krasnaya zvezda, 13 Jan 66, p. 2, col. 1-3

TOPIC TAGS: specialized training, antiaircraft defense

ABSTRACT: In his discussion of the Command Academy of Antiaircraft Defense, the author notes the following main points: (1) in view of the rapid obsolescence rate of equipment, the academy officer-student should concentrate on learning the basic parameters rather than each component of a given piece of equipment; (2) since many competent officers are reluctant to join the faculty, they should be morally and materially encouraged to do so; (3) in view of the ever declining number of officers with command experience who reach the academy, provision should be made to allow the latter to prepare for the competitive entrance exams.

SUB CODE: 15/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 1/1 CC

PETROV, I.N.; KORSHUNOV, Ye.A.; CHIRKOV, B.S.

Improving the OT-24-51 oscillograph. Izm.tekh. no.11:29-31 N '60.
(MIRA 13:11)

(Oscillograph)

KORSHUNOV, Yo. A.: Cand Master Tech Sci (diss) -- "Investigation of the kinematics and dynamics of the handling equipment of blooming mills". Sverdlovsk, 1958. 18 pp (Min Higher Educ USSR, Ural Polytech Inst im S. M. Kirov, Chair of "Mechanical Equipment of Metallurgical Plants"), 150 copies (KL, No 2, 1959, 121)

SOV/137-59-3-6790

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 266 (USSR)

AUTHOR: Korshunov, Ye. A.

TITLE: The Effect of the Operation of a Manipulator on the Productivity of a Blooming Mill (Vliyaniye raboty manipulyatora na proizvoditel'nost' blyuminga)

PERIODICAL: Tr. Mezhvuz. nauchno-tekhn. konferentsii na temu. "Sovrem. dostizh. prokatn. proiz-va", Leningrad, 1958, pp 158-161

ABSTRACT: Comprehensive timing of the operation of blooming mills (BM) numbers 2 and 3 at the MMK and the BM "B" at the NTMK combined with an analysis of the oscillograms of the operating conditions of manipulator (M) motors of these and other BM's demonstrated that the cycle of rolling of one ingot frequently fluctuates to a considerable degree. In many respects these fluctuations depend on the operation of the M. The effect of the M on the operation of the BM is at a maximum when the strip is being transferred from one roll pass to another, an operation requiring a displacement of the M side guards by a distance of ~ 450 mm. In the process, the operator of any BM is forced to switch the M motors to dynamic braking

Card 1/2

The Effect of the Operation of a Manipulator on the Productivity (cont.)

at a time when the side guards have not yet attained their nominal speed (NS); as a result, repeated starting, which is necessary to move the side guards at low speeds, significantly prolongs the cycle of rolling of an ingot. Therefore, the trend toward higher NS's of the M's of newly-designed BM's is regarded as erroneous by the author who contends that in order to achieve good performance of the M the side guards of the latter must move smoothly and accurately by as much as 400-500 mm, a condition which may be achieved only at small (~1 m/sec) NS's. It is suggested that M's without reduction drives be employed and that, in particular, the reduction drive of the VMZ manipulator be replaced by another drive, manufactured by the UZTM, employing no reduction gears; in addition to reducing the NS of the side guards to 1 m/sec, this measure will also increase the productivity of the BM by 10%. The weight of the moving parts of the M should be reduced and, in performing the appropriate calculations, the σ_b value of metal, at a temperature of 1150-1200°C for straightening operations, should be assigned a value of 2-25 kg/mm^2 rather than 5 kg/mm^2 as is done at the UZTM.

V. D.

Card 2/2

PAIMOV, Ye. V., doktor tekhn. nauk, prof.; BAIMOV, N. I., kand. tekhn. nauk; MORSHUNOV, Ye. A., kand. tekhn. nauk; PETROV, I. N., kand. tekhn. nauk

Investigating the strength of construction of certain parts of blooming mill shears. Trudy Ural'. politekh. inst. no.119: 28-34 '62. (MIRA 16:1)

(Rolling mills(Equipment and supplies))
(Shears(Machine tools)—Testing)

PAL'MOV, Ye.V., prof., doktor tekhn.nauk; KALININ, A.I., inzh.;
KORSHUNOV, Ye.A., assistent; BAIMOV, N.I., assistent;
PETROV, I.N., assistent

Experimental investigation of the No. 1 shears of the No.3 blooming mill at the Magnitogorsk Metallurgical Combine. Trudy Ural.politekh. inst. no.101:21-32 '60. (MIRA 14:3)
(Rolling mills) (Shears (Machine tools))

PAL'MOV, Ye. V., doktor tekhn. nauk, prof.; BAIMOV, N. I., kand. tekhn. nauk, assistent; KORSHUNOV, Ye. A., kand. tekhn. nauk, assistent; PETROV, I. N., kand. tekhn. nauk, assistent; KALININ, A. I., inzh.

Developing and investigating new conditions of cutting with the shears of blooming mill No. 3 at the Magnitogorsk Metallurgical Combine. Trudy Ural'. politekh. inst. no.119:22-27 '62. (MIRA 16:1)

(Magnitogorsk--Rolling mills)
(Shears(Machine tools))

Korshunov, Ye.S.

GAZYAN, G.S., kandidat tekhnicheskikh nauk; ESKIN, M.G.; KORSHUNOV, Ye.S.; OSTROVSKIY, Yu.I.; ROMANOVA, Ye.I.

Mechanization of bit feeding. Trudy TSIMTnefti no.1:3-22 '54.
(MLRA 10:9)
(Oil well drilling--Equipment and supplies)

GAZYAN, G.S.; KORSHUNOV, Ye.S.; OSTROVSKIY, Yu.I.; ROMANOVA, Ye.I.; ESKIN, M.G.

Feed mechanism of the MPD-1 drill. Neft.khoz. 32 no.11:15-19 N '54. (MLRA 7:12)
(Oil well drilling) (Boring machinery)

KORSHUNOV, Ye.S.; SHIBRYAYEV, B.F.

Using light alloys for reducing the weight of drilling rigs.
Neft.khoz. 37 no.12:1-5 D '59. (MIRA 13:5)
(Oil well drilling rigs)

KORSHUNOV, Ye.S., inzh.; KOTLYAR, O.M., inzh.

Air-friction bit-feeding mechanism. Trudy Giprneftemasha. (MIRA 15:8)
Neftepromdelo no.1:37-44 '61.
(Oil well drilling--Equipment and supplies)

KORTUNOV, A.K.; KORSHUNOV, Ye.S.; KUZNETSOV, P.L.; BARABASH, B.B.; PROMTOV, A.I.; SHAKIROV, M.Z.; ALI-ZADE, M.A.; KHODZHAYEV, A.K.; ALEKSANDROV, A.V., red.

[Gas industry in the U.S.A.] Gazovaia promyshlennost' SShA. Moskva, Nedra, 1964. 339 p. (MIRA 18:9)

KORSHUNOV, Ye.V., general-leytenant

Officers must have sound technical knowledge. Vest.protivovzd.obor. no.9:12-14 S '61. (MIRA 14:8)
(Military education)

KORSHUNOV, Ye.V., inzh.

Testing the PD-1 diesel locomotive engine. Vest. TSNII MPS no.7:22-24 '61. (MIRA 14:12)
(Diesel locomotive—Testing)

POMERANTSEV, V. V., Cand Tech. Sci.; SYRKINA, K. D., Cand Tech. Sci.; LIVEROVSKIY, A. A., Cand Tech. Sci; KORSHUNOV, Yu. A., Cand. Tech. Sci.

"Erfahrungen mit einer kombinierten Ausnützung von Holzabfällen für Energieerzeugung und chemische Verwertung," List of General Reports and Papers presented at the Fifth World Power Conference, Vienna, 10 January 1956, pg. 28.

E-2298

KORSHUNOV, Yu.I., kand. voyenno-morskikh nauk, kapitan 2-go ranga.

Use of trainers for training the personnel of antisubmarine forces.
Mor. sbor. 48 no.10:78-83 O '65. (MIRA 18:9)

KORSHUNOV, Yu. M.

1399. Graphical method for calculating transient processes in current transformers. Yu. M. Korshunov. Elektrichestvo, 1953, No. 10, 36-7. 62
In Russian.

The use of current transformers in fast-operating relay protection systems and in some measuring circuits requires the knowledge of transformer errors under transient operating conditions. A method, which takes into account the effects of remanence and hysteresis, is presented for plotting the transient flux density and the transient magnetizing current. The method is claimed to give errors of only 10-12% and to be simpler and more accurate than any other known analytical or graphical solution.

E. M. Dembinski.

RYAZAN RADIOTECH. INST.

SOV/112-57-6-12556

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 6, p 134 (USSR)

AUTHOR: Korshunov, Yu. M.

TITLE: Measuring Large AC Currents Under Transient Conditions by Instrument Transformers Without Steel Cores (Izmereniye bol'shikh peremennykh tokov v perekhodnykh rezhimakh i s pomoshch'yu ismeritel'nykh transformatorov bez stal'nykh serdechnikov)

PERIODICAL: Tr. Ryazansk. radiotekhn. in-ta, 1956, Vol 1, pp 156-163

ABSTRACT: In dynamic-stability tests of electrical equipment, it is often necessary to know the value and the waveshape of very heavy short-time currents. Conventional current transformers or shunts can do little good in the measurement of such currents. Under steady-state conditions, large AC currents are measured by coreless instrument transformers. To use the same transformers under transient conditions, the author tried to solve this problem: find the parameters of a fourpole that must be connected between the coreless instrument transformer and a measuring instrument so that the current through the instrument would accurately reproduce the shape of the primary current,

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SOV/112-57-6-12556

Measuring Large AC Currents Under Transient Conditions by Instrument . . . .

i.e., that $i(t) = i_1(t)$. Such a fourpole should satisfy these conditions: $A(t) = at$ and $Z(p) = \frac{e_2(p)}{i(p)} = \frac{1}{a}p$, where A(t) is the current through the instrument when an EMF equal to a unit function is applied to the input of the fourpole; Z(p) is the operational impedance of the fourpole; e_2 is the EMF of the instrument transformer. It is impossible to build a real fourpole that would exactly satisfy the above conditions. Therefore, two fourpole circuits approximating the above conditions are considered: (a) an inductance and a resistance connected in series (it is required that $r \ll L$) and (b) a T-circuit with resistors r_1, r_2 in the arms and a capacitance C at the base (it is required that $r_1 + r_2 \ll r_1 r_2 C$). The latter circuit provides good accuracy of measurement with very heavy currents, the accuracy being higher and the device being more compact for higher values of the measured current.

V.M.L.

Card 2/2

30481

S/146/61/004/005/006/011
D221/D305

16.8000 (1013, 1132, 1329)

AUTHOR: Korshunov, Yu.M.

TITLE: Methods of improving the interference-proof feature of digital systems of automatic control

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 5, 1961, 76-83

TEXT: The author discusses in detail a procedure based on codes with error detection which requires only one supplementary digit. The restoration of the correct value of signal can be made by extrapolation of the previous undistorted values. The device for extrapolation of signals is called by the author the bloc of prognosis. The digital values of input signal $x(t)$ at the instants $t = nT$ are denoted by x_n. It is assumed that in a small interval Δt the signal can be represented by the first three terms of Taylor expansion. The signals are random quantities, but maximum speed and acceleration of former can be determined, and, therefore, errors

4

Card 1/3

Methods of improving...

in the forecast can be calculated. The actual maximum error digital counting is $\varepsilon_{max} = \omega_{max} T + 0.5$ (bin. un.), where ω_{max} is the maximum rate of signal change in the interval T. The practical use of this bloc is limited to systems where the input signal varies very slowly. If the values of x_{n-1} and x_n are known, the maximum error is given by $\varepsilon_{max} = a_{max} T^2$, where a_{max} is the maximum possible acceleration of the input signal. The total error of forecasting may attain the value of $\varepsilon_{max} = a_{max} T^2 + 1.5$ (bin. un.). The logical structure of the arrangement for error correction is then discussed; diagrams of two possible arrangements, one with prediction for one quantization period and one with prediction for two quantization periods, are given; the second is stated to be more advantageous. This article was recommended by the Kafedra avtomatiki i telemekhaniki (Department of Automation and Telemechanics). There are 4 figures and 3 Soviet-bloc references.

4

Card 2/3

23960

S/103/61/022/007/006/008
D252/D302

16,8000 (1121, 1344, 1068)

AUTHOR: Korshunov, Yu. M. (Ryazan')

TITLE: Analysis of self-oscillations due to level quantization of signals in automatic digital systems

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 7, 1961, 885-895

TEXT: The amplitude and frequency of self-oscillations due to level quantization are determined by a method based on describing functions. In order to obtain more general results it is convenient to take the value of one quantization-level as the unit of measurement of the signal-levels, and the period of time quantization T_0 as the unit of time measurements, i.e. to introduce the dimensionless time $\tau = t/T_0$. With such stipulations the self-oscillations due to level-quantization can be investigated by means of an equivalent pulse-relay system. The considerations are limited to the case of symmetrical operating conditions of a single-step relay, the duration δ of the positive and negative pulses being the same for each

Card 1/4

Analysis of self-oscillations...

relay. The signal $\varepsilon(\tau) = |\varepsilon| \sin(\Omega\tau + \Phi)$, (3) where $\Omega = \frac{2\pi}{T}$ is the relative frequency, is applied to the input of the pulse element. The complex amplitude of this signal is $\dot{\varepsilon} = |\varepsilon| e^{j\varphi}$. (4) One obtains at the output of the relay element a non-sinusoidal, but periodic signal $G(\tau)$, whose first harmonic is

$$\Gamma(\tau) = \gamma \sin(\Omega\tau - \alpha) = A \sin\Omega\tau + B \cos\Omega\tau. \quad (5)$$

The complex amplitude of the first harmonic is

$$\dot{\Gamma} = \gamma e^{-j\alpha} = A + jB. \quad (6)$$

The non-linear element is characterized by the equivalent complex amplification factor N, which is defined as the ratio of the complex amplitudes of the first harmonics of the input signals to first harmonics of output signal. The existence condition for self-oscillations is $W(j\Omega) = Z$. (12) This condition can be most easily verified by a graph in the complex plane by finding the common points of the characteristics $W(j\Omega)$ and Z. (W(q) is the transfer function, $(q = pT_0)$). The signal at the relay output is shown in Fig. 3. The values of $|\varepsilon|_{min}$ and $|\varepsilon|_{max}$ for various δ, as well as

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the corr sponding values of f^* were calculated, for the case of a single-st ep relay characteristic, by Chow, C.K. (Ref. 4: Contactor Servomechanism Employing Sampled Data., AIEE Transactions, vol. 73, pt. II, 1954). The regions of allowed values of Z should be constructed for various T and all possible combinations of δ for each T. The generalized Z-regions which correspond to the operation of a large number of steps of the characteristic, are mainly placed inside the regions which correspond to the operation of a smaller number of steps. As normally the appearance of self-oscillations with large amplitude is inadmissible, it is possible in practice to confine oneself to the construction of a small number of generalized regions Z. The method is exposed of constructing the regions -E and Z. An example is given with the following transfer function

$$W(q) = \frac{1.6}{q(1 + 2.5q)} .$$

The author reaches the conclusion that the graphic method of describing functions gives results which are in satisfactory agreement with the results of accurate numerical calculations, especially for

large amplitudes. There are 7 figures, 3 tables and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publications reads as follows: C.K. Chow, Contactor Servomechanisms Employing Sampled Data. AIEE Transactions, vol. 73, pt. II, 1954. [Abstracter's note: Ref. 5: Kh. James, N. Nichols, P. Phillips: Teoriya sledyashchikh sistem, Izd-vo inostr. liter., 1953 is a translation from English into Russian]

SUBMITTED: December 19, 1960

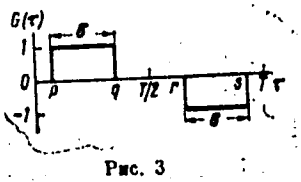

Рис. 3

Fig. 3

S/146/62/005/005/008/016
D201/D308

AUTHOR: Korshunov, Yu. M.

TITLE: Determination of errors resulting from level quantization in sampled-data automatic control systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v.5. no. 5, 1962, 65-74

TEXT: In the present article the authors considers certain methods of determining errors in sampled data automatic control systems as due to the signal level quantization. The sampled data systems are considered in the form as given by Ya. Z. Tsypkin (Ya. Z. Tsypkin. Otsenka vliyaniya kvantovaniya po urovnyu na protsessy v tsifrovykh avtomaticheskikh sistemakh (Evaluation of the effect of level quantization on processes in digital automatic systems), Avtomatika i telemekhanika, 1960, v. 21, no. 3) and (Elementy teorii tsifrovykh avtomaticheskikh sistem (Elements of the theory of automatic digital systems), Trudy 1 Mezhdunarodnogo Kongressa IFAK, AN SSSR, 1961, v. 2) which takes a sampled data

Card 1/2

42816

16.8000

S/146/62/005/006/002/006
D201/D308

AUTHOR: Korshunov, Yu.M.

TITLE: Optimal sampled-data automatic control system structures

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Priborostroyeniye, v. 5, no. 6, 1962, 35-42

TEXT: The author shows that a sampled-data control system may be represented as a series connection, for the duration of one quantization period, of an extrapolation section and of a delay element and hence that all designs of sampled data control systems may be regarded as extrapolating systems. If the extrapolation is represented by polynomials of degree S, then the best extrapolation is obtained from the Newton's interpolation formula and a prediction system utilizing this expression is called an optimal sampled-data control system. For such a system the method of evaluating the optimal transfer function is given together with that of selecting the required number of bits of the binary code in use and the maximum

Card 1/2

Optimal sampled-data ...

allowable duration of the quantization period. There are 4 figures and 2 tables.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Ryazan' Institute of Radio Engineering)

SUBMITTED: November 20, 1961

Card 2/2

37824

S/103/62/023/005/005/011
D407/D301

16,6800 (2403)

AUTHOR: Korshunov, Yu.M. (Ryazan')

TITLE: On determining the equivalent complex gain-factor of a non-linear sampled-data element

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 5, 1962, 590 - 601

TEXT: The method of determining the equivalent complex gain-factor of a non-linear sampled-data element is considered. In the references, the equivalent complex gain-factor was determined from the frequency characteristic $W^*(e^{j\bar{\omega}})$ of the linear part of the system. Such a modification of the describing-function method permits extending it to digital control-systems, incorporating digital computers which operate with purely discrete signals; in simple cases, it yields fully accurate solutions. Some aspects of this modified describing-function method constitute the subject of this article. The equation of an ideal non-linear sampled-data element (NSE) is

$$g_n = f(\varepsilon_n, \sin \Delta \varepsilon_n). \qquad (3)$$

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On determining the equivalent ...

In the following it is assumed that the characteristic of the nonlinear element is symmetrical with respect to the origin of coordinates. A sinusoidal signal $\varepsilon(\bar{t})$ with relative period N is applied to the input of the ideal NSE. Thereupon a discrete periodic signal g_n with same period N is obtained at the output. The condition for the existence of periodic motions (according to the describing-function method), in the absence of an external input signal, is:

$$\Gamma W^*(e^{j\frac{2\pi}{N}}) = -E \text{ or } W^*(e^{j\frac{2\pi}{N}}) = Q^* \qquad (12)$$

where

$$Q^* = -\frac{E}{\Gamma} = -\frac{|\varepsilon|}{|\gamma|} e^{j(\varphi+\alpha)} = -\frac{1}{J^*}, \qquad (13)$$

($J^* = \Gamma/E$ being the equivalent complex gain factor of the ideal NSE). The fulfillment of condition (12) can best be checked graphically, by constructing the characteristics Q^* and $W^*(e^{j\bar{\omega}})$ on the complex plane and by finding the common points of these characteristics for various integral values of N. By analyzing the obtained relations, it is possible to formulate the following rules for the construction of the characteristic Q^*: 1) With a single-valued characteris-

the -E-plane, into the region G* of the Q*-plane. Thus the characteristic Q* constitutes a number of regions G* for each value of N. A table lists the threshold values of ε_k and of g_k on both sides of the switching lines. The method of construction of the regions G is set forth in detail for the case N = 5, for which $\theta = 72^{\circ}$. The method of construction of the switching lines is illustrated by an example. The graphs of the regions G* for $\Delta = 0.2$ and $\eta = 0.5$ are shown. Formulas for the calculation of the first harmonic of a periodic mesh-function are derived (in an appendix). There are 7 figures, 3 tables and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: C.K. Chow, Contactor Servomechanisms Employing Sampled Data. Trans. AIEE, v. 73, p. II, 1954.

SUBMITTED: January 20, 1962

KORSHUNOV, Yu.M.

Determining the structure of a digital automatic control system making minimum error caused by level quantization. Izv.vys.ucheb. zav.; prib. 6 no.6:56-62 '63. (MIRA 17:3)

1. Ryazanskiy radiotekhnicheskiy institut. Rekomendovana kafedroy avtomatiki i telemekhaniki.

ACCESSION NR: AP4044834 S/0280/64/000/004/0142/0148

AUTHOR: Korshunov, Yu. M. (Ryazan')

TITLE: Oscillatory operational conditions in sampled-data control systems with saturation and deadband

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1964, 142-148

TOPIC TAGS: automation, control system, sampled data control system, system saturation, deadband, harmonic analysis, grating function

ABSTRACT: The paper considers specific problems arising in harmonic analysis of sampled-data systems having nonlinearities in the form of saturation and deadband. The continuous part of the system is assumed to contain at least one integrating element and only symmetric modes of operation are considered. The oscillatory mode is characterized by the number of sampling-points to each value of a region in the complex plane. An example is given in detail and equations are derived for the bounding straight lines when deadband is involved. Some properties of periodic grating-functions are then discussed and it is shown that oscillatory conditions are possible when the signal at the

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ACCESSION NR: AP4044834

output of the nonlinear sampling element takes the form of such a function with relative period N, an integer, the envelope of which has a period N/γ where N and γ are reciprocals of simple numbers. When nonlinearity is of the saturation-type, the oscillatory condition is stable. The conclusions were verified numerically with a particular, continuous transfer function and a detent mechanism to generate unit discontinuity. In the case of a system with deadband, oscillations with amplitude less than a critical value were damped out, and above this value they showed increasing amplitude.

ASSOCIATION: none

SUBMITTED: 10Jun63 ENCL: 00 SUB CODE: IE

NO REF SOV: 007 OTHER: 002

Card 2/2

ACCESSION NR: AP4036514 S/0103/64/025/005/0702/0711

AUTHOR: Korshunov, Yu. M. (Ryazan')

TITLE: Reproduction of continuous quantities specified by a digital code

SOURCE: Avtomatika i telemekhanika, v. 25, no. 5, 1964, 702-711

TOPIC TAGS: automatic control, digital automatic control, automatic control theory

ABSTRACT: A continuous quantity x(t), which has continuous and limited derivatives, is defined in digital form by its discrete values x_n taken at equal time intervals T. A digital automatic-control system is synthesized which, without delay, reproduces the quantity x(t) or a function $H[x(t)] = h(t)$, thereof; a maximum quantization period T is determined, as well as the number of digits of the binary digital code which ensures the required accuracy of reproduction. Formulas for predicting the signal and its derivative values are tabulated. Three

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ACCESSION NR: AP4036514

automatic-control digital systems — reproducing, differentiating, and integrating — are analyzed, and formulas for their errors and quantization periods are developed. Orig. art. has: 2 figures, 44 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 04Jun63 DATE ACQ: 03Jun64 ENCL: 00

SUB CODE: DP, IE NO REF SOV: 006 OTHER: 000

Card 2/2

KORSHUNOV, Yu.M. (Ryazan')

Reproduction of continuous values given by a digital code.
Avtom. i telem. 25 no.5:702-711 My '64. (MIRA 17:9)

KORSHUNOV, Yu.M., inzh.

Repairing the receiving nozzle of the relay amplifier of a regulator. Sudostroenie 30 no.7:50 Jl '64.

Device for machining valve seats. Ibid.:51 (MIRA 18:9)

ACC NR: AT7004329 SOURCE CODE: UR/0000/66/000/000/0116/0126

AUTHOR: Korshunov, Yu. M. (Ryazan'); Bobikov, A. I. (Ryazan')

ORG: none

TITLE: Digital smoothing filters

SOURCE: AN UkrSSR. Metody i sredstva preobrazovaniya informatsii (Methods and means of information conversion). Kiev, Naukova dumka, 1966, 116-126

TOPIC TAGS: electric filter, digital filter, smoothing filter

ABSTRACT: Digital filters with infinite transient time (W. Karush, IRE Trans., EC-4, no. 1, 1955) have a low order of astatism, i.e., high dynamic error. The present article offers a method for synthesizing digital filters with infinite transient time which can smooth down and also transform functionally the signal; their order of astatism can be made sufficiently high. A filter with an exponential

Card 1/2

ACC NR: AT7004329

weight function and an infinite transient time is equivalent (as far as reproduction of linear signal and smoothing of noise are concerned) to a filter with finite transient time that has a rectangular weight function. The new filter can be designed according to this formula: $V_n = x_n + \Delta_0 V_{n-1}$, where the signal mean value is $v_n = \Delta_0 V_{n-1}$. If $\Delta_0 = 2^{-q}$, the $V_n \Delta_0$ multiplication can be reduced to shifting V_n by q places to the right. Block diagrams of the new filter for 0, 1, and 2 orders of astatism are shown. Orig. art. has: 2 figures and 66 formulas.

SUB CODE: 09 / SUBM DATE: 14Jul66 / ORIG REF: 003 / OTH REF: 001

Card 2/2

KORSHUNOV, Yu.P.

Species of Rhopalocera (Lepidoptera) in the northern Ob' Valley.
Izv.Sib.otd.AN SSSR no.7:116-120 '60. (MIRA 13:8)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR.
(Ob Valley--Butterflies)

KORSHUNOV, Yu.P.

Diurnal lepidopterans (Lepidoptera, Diurna) in the shore region of Novosibirsk Reservoir. Trudy Biol. inst. Sib. otd. AN SSSR no.7:199-207 '61. (MIRA 15:3)
(NOVOSIBIRSK RESERVOIR REGION--BUTTERFLIES)

KORSHUNOV, Yu.P.

Butterflies(Lepidoptera, Rhopalocera) of the mountain section and southern coast of the Crimea. Ent. oboz. 43 no.3:592-604 '64.
(MIRA 17:10)

1. Biologicheskiy fakul'tet Khar'kovskogo gosudarstvennogo universiteta imeni A.M.Gor'kogo, kafedra entomologii, g. Khar'kov, i Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, laboratoriya entomologii, g. Novosibirsk.

L 42316-66 EWT(1) GW

ACC NR: AT6016732 (N) SOURCE CODE: UR/2635/65/000/005/0166/0172

AUTHOR: Korshunov, Yu. S.

28
B+1

ORG: Marine Hydrophysics Institute, AN UkrSSR (Morskoy gidrofizicheskiy institut AN UkrSSR)

TITLE: Recording of wave elements by a wavegraph of the A. A. Ivanov system under laboratory conditions

SOURCE: Leningrad. Gosudarstvennyy gidrologicheskiy institut. Sbornik rabot po gidrologii, no. 5, 1965, 166-172

TOPIC TAGS: hydrophysics, wave mechanics, wave propagation, wave front, hydrodynamics

ABSTRACT: A method of processing photorecords of waves with the aid of a slit-type photowavegraph of the A. A. Ivanov type is presented and described in terms of performance under laboratory conditions. The measurement principle involves the variation of resistance in an electrical network as a function of the fluctuation of the water level with a passing wave. The working equations of the method are referenced to the scheme shown in Fig. 1. Line KM is the line of intersection of the surface of the water in a trough or test basin with the plane line. The objective of the device is placed at B, and its principal optical axis is in the direction BГ. OA is the focal plane of the objective; the surface of the water is projected through the objective onto this plane. L is the object; H_0 is the vertical distance from the

Card 1/3

L 42316-66

ACC NR: AT6016732

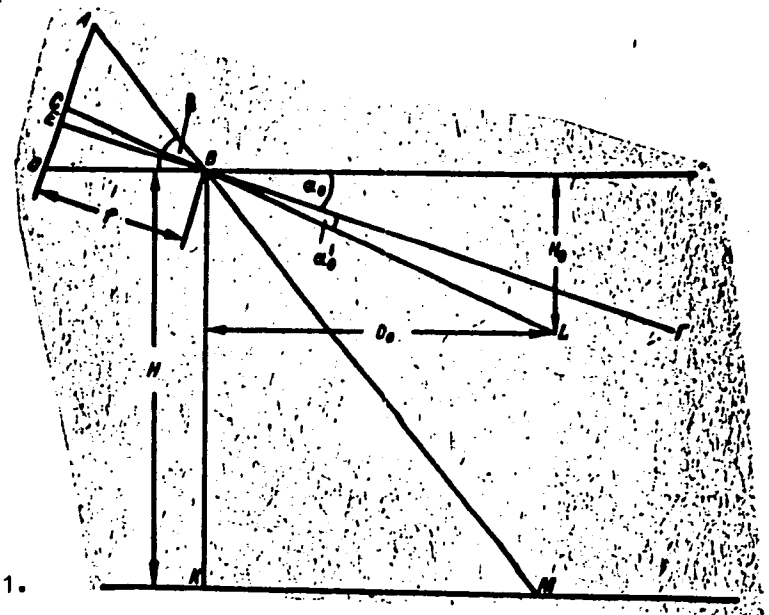


Fig. 1.

objective to the object L; D_0 is the corresponding horizontal distance; H is the height of the objective above the undisturbed water level; F is the focal distance of the objective; and M is a point on the surface of the water, which is visible from B at an angle β with the real horizon. Using the variable definitions

Card 2/3

L 42316-66

ACC NR: AT6016732

$$EC = z;\quad AC = y';\quad \frac{y'}{f} = x;\quad kM = D;$$

$$\frac{H_0}{D_0} = \gamma,$$

the relationship

$$D = \frac{H\left(1 - x\,\mathrm{tg}\,\alpha_0 - \frac{\gamma\,\mathrm{tg}\,\alpha_0 - \mathrm{tg}^2\alpha_0}{1 + \gamma\,\mathrm{tg}\,\alpha_0}\right)}{x + \mathrm{tg}\,\alpha_0 + \frac{1 - \mathrm{tg}\,\alpha_0}{1 + \gamma\,\mathrm{tg}\,\alpha_0}}$$

can be derived. This leads to expressions for the height of the wave and expressions for phase differences and frequencies or wave velocities. An example of wave recordings is given and system errors are discussed. Orig. art. has: 15 equations and 5 figures.

SUB CODE: 08,20/SUBM DATE: none/ ORIG REF: 006

Card 3/3

KOSHUNOV, Yu.S.

Effect of shallow waters on the stability of waves. Izv. AN SSSR. Ser. geofiz. no. 2:324-327 F '61. (MIRA 14:2)

1. Morskoy gidrofizicheskiy institut AN SSSR.
(Waves)

IVANOV, A.A.; KORSHUNOV, Yu.S.

Formulas for computing wave elements from photographs and photograms obtained with A.A. Ivanov's photographic wave recorder. Trudy MGI 23:73-78 '61. (MIRA 14:11)

(Waves)
(Photogrammetry)

KORSHUNOV, Yu.S.

Perspective photography of sea waves using an aeral photographic camera from an airplane. Trudy Mor.gidrofiz.inst. AN URSR 28: 81-84 '63. (MIRA 17:3)

KORSHUNOV, Yu. V.

USSR/Nuclear Physics - Instruments and Installations
Methods of Measurement and Investigation

C-2

Abs Jour : Referat Zhur - Fizika, No 1, 1958, 242

Author : Korshunov, Yu.V., Meleshko, Ye.A., Panosyuk, V.S.

Inst : Institute of Atomic Energy, Academy of Sciences, USSR.

Title : Instrument for Observation of the Distribution of Current of Accelerated Ions on a Cyclotron Target.

Orig Pub : Pribory i tekhn. eksperimenta, 1957, No 2, 23-24

Abstract : To determine the distribution of current in a beam of accelerated ions over the area of the target, one employs usually a special probe, consisting of 10 -- 15 laminas, grounded through calibrated resistances, on which one measures by means of an indicator in sequence the voltage drop due to the current of accelerated ions. The authors describe a circuit, with which it is possible to observe

Card 1/2

SOV-120-58-1-7/43

AUTHORS: Antonov, A. V., Korshunov, Yu. V., Meleshko, Ye. A. and Panasyuk, V. S.

TITLE: Stabilisation of the High Frequency Voltage on the Dee of a Cyclotron (Stabilizatsiya napryazheniya vysokoy chastoty na duante tsiklotrona)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 1, pp 41-46 (USSR)

ABSTRACT: Nuclear reaction studies which are being carried out at the present time require high stability in cyclotron parameters. The following quantities require stabilisation: intensity of the magnetic field, frequency of the h.f. voltage which is applied to the dee, amplitude of the h.f. voltage on the dee and the magnitude of the reflecting potential. It is also desirable to stabilise the ion current from the source. Thus the stabilisation of the dee potential must be looked upon as one of a set of problems associated with the stabilisation of the cyclotron parameters. A comprehensive dee voltage stabilisation should include a stabiliser of the dee voltage relative to the earth as well as

Card 1/2

SOV-120-58-1-7/43

Stabilisation of the High Frequency Voltage on the Dee of a Cyclotron.

an inter-dee voltage stabiliser. A description is given of the principle and a circuit of an amplitude stabiliser for the h.f. voltage on one of the dees. The stabiliser can be used either continuously or with a modulated signal. The circuit diagrams are given in Figs.3 and 5. The h.f. voltage stabiliser was applied to the "attracting" dee and was tested on a working machine. Introduction of the stabiliser led to a real improvement in the stability of the ion beam at the cyclotron target. In addition, destabilising factors such as random surges are eliminated which ensures smooth running of the machine. The regulation characteristic is given in Fig.4. I. P. Vyazovetskiy, D. A. Kuznetsov, V. Z. Loskutov, R. A. Ariskina, B. V. Rybakov and V. A. Sidorov collaborated. There are 5 figures and 7 Soviet references.

SUBMITTED: June 15, 1957.

1. Voltage stabilizers--Performance 2. Voltage stabilizers--Circuits
3. Cyclotrons--Equipment

Card 2/2

KORSHUNOV, Yu V.

PHASE I BOOK EXPLOITATION SOV/5333

Pebalinteeve, O. M., ed.

Uskoriteli; atomik statey (Accelerators; Collection of Articles) Moscow, Atomizdat, 1960. 121 p. Errata slip inserted. 5,000 copies printed.

Scientific Ed.: B.N. Yablokov; Ed.: O.M. Pebalinteev; Tech. Ed.: K.A. Vinogra.

PURPOSE: This collection of articles is intended for scientists and engineers engaged in the construction and operation of particle accelerators.

COVERAGE: These original articles treat specific problems arising in the operation of present-day accelerators, particularly linear electron accelerators. A new accelerator put into operation at the Physicotechnical Institute (Ukrainian Physicotechnical Institute) is described, and problems in the dynamics of particles in linear electron accelerators are discussed. New methods are discussed for the extraction of particles from accelerators. Problems associated with the charging of permanent magnetic fields in the series cyclotron to the phasotron are also treated. The changeover of the series cyclotron to the phasotron is described, and some problems connected with the bunching of particles are elaborated. The chargeover of the energy of accelerated particles accelerating mode with a view to increasing the energy of accelerated particles article. No personalities are mentioned. References accompany each

TABLE OF CONTENTS:

S/058/61/000/007/007/086
A001/A101

AUTHORS: Antonov, A.V., Korshunov, Yu.V., Meleshko, Ye.A., Nemenov, L.M., Panasyuk, V.S.

TITLE: Ferrite frequency changer for conversion of a cyclotron to the phasotron system of acceleration

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 37-38, abstract 7B34 (V sb. "Uskoriteli", Moscow, Atomizdat, 1960, 60 - 72)

TEXT: In order to bring about the proposal on the conversion to the phasotron operation of acceleration of the mass-produced cyclotron with the diameter of electromagnet poles 1,200 mm and to produce 30-Mev protons (instead of 12.6 Mev) in it, the frequency in the acceleration process must be changed by about 5%. The authors have constructed, for modulation of cyclotron frequency, a circuit with ferrite core and radio engineering equipment connected with it. The change of resonance frequency of the dee circuit is brought about by connecting with it an inductance with ferrite core and excitation of the core by alternate current with a frequency equal to that of acceleration cycles. The problem of selecting the ferrite and the method of connecting the circuit with the fer-

Card 1/2

Ferrite frequency changer ... S/058/61/000/007/007/086
A001/A101

rite are discussed. The equipment was tested by acceleration of deutrons. Frequency variation in this case amounted to 1.8%. At the final diameter the average stream of deutrons with 2 - 3 μamp was obtained. The current pulse amounted to 60 - 90 μamp.

A. Talyzin

[Abstracter's note: Complete translation]

Card 2/2

33137
S/120/61/000/006/003/041
E032/E114

24.6740

AUTHORS: Korshunov, Yu.V., and Meleshko, Ye.A.

TITLE: A magnetic ring for the measurement of ion current in a beam extracted from a cyclotron

PERIODICAL: Pribory i tekhnika eksperimenta, no.6, 1961, 24-26

TEXT: The beam current measuring device described by the present authors is similar in principle to those described by L. Bess and A.O. Hanson (Ref.1: Rev. Scient. Instrum., 1948, 19, 108) and I.A. Grishayev, N.I. Mocheshnikov and V.F. Ivanov (Ref.2: PTE, 1960, no.4, 17). The present device includes a ferrite core. The beam passes freely through it and the device has no effect upon it. The principle of the device is illustrated in Fig.1, in which 1 is the ion beam, 2 is the magnetic ring, 3 the amplifier, and 4 the output meter. A schematic drawing of the detector itself is shown in Fig.2 (1 - envelope, 2 - teflon insulator, 3 - magnetic ring, 4 - retaining ring, 5 - flange of ion beam pipe, 6 - lead diaphragm). The magnetic ring is made of НЦ-800 (NTs-800) ferrite (μ = 800) and carries 5 turns of copper deposited directly upon it. The outer diameter of the ring is

Card 1/ 1 3

X

A magnetic ring for the measurement...

120 mm, the inner diameter is 85 mm. At high frequencies (10 Mc/sec or more) there is considerable damping in the circuit formed by the ring and the capacitance to earth C (Q ~1.5-2). This means that the device can be used in a wide frequency range without retuning. Two types of amplifier were employed. The first was a tuned amplifier with a bandwidth of 4 Mc/sec, and the second was a narrow band device based on the superheterodyne principle. The former had the disadvantage of high noise level and was used for large currents; the latter was designed for small currents. Currents of the order of 1 microampere or more can be measured to an accuracy of about 5%. Lower accuracy obtains at lower currents. Preliminary experiments on the irradiation of the ferrite by deuterons (1 μamp/cm^2 at 19.6 MeV for 12 hours) showed that the ferrite was practically unaffected by the irradiation. However, it is stated that this is only a preliminary result.

Acknowledgments are expressed to V.S. Panasyuk for suggesting this subject and to A.V. Antonov for discussions and advice.

There are 2 figures and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc.

X

33137
S/120/61/000/006/003/041
E032/E114

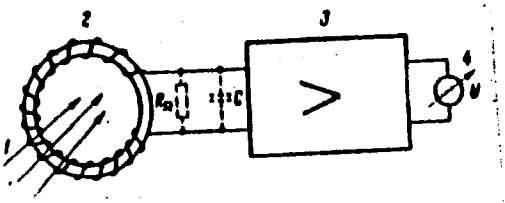
A magnetic ring for the measurement ...

The English language reference is as quoted in the text above.

ASSOCIATION: Institut atomnoy energii AN SSSR
(Institute of Atomic Energy, AS USSR)

SUBMITTED: March 21, 1961

Fig. 1



Card 3/3

KORSHUNOV, Yu.V.; MELESHKO, Ye.A.

Magnetic zone for measuring ion current in the beam produced by a cyclotron. Prib. i tekh.eksp. 6 no.6:24-26 N-D '61. (MIRA 14:11)

1. Institut atomnoy energii AN SSSR.
(Ion beams—Measurement)
(Cyclotron)

KORSHUNOVA, A., shtampovshchitsa; NIKITIN, V., brigadir; YUSHKOV, V., sostavshchik; SAVEYKO, A., starshiy master.

Noticeable improvement. Sov.profsoiuzy 5 no.11:27-29 N '57.
(MIRA 10:11)
(Electric industries--Safety measures)

KORSHUNOVA, A., kand. sel'skokhoz. nauk; KALASHNIKOV, K., kand. sel'skokhoz. nauk

Diseases of wheat seeds. Zashch. rast. ot vred. i bol. 10 no.10:31-33 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy.

KORSHUNOVA, Z.; KORSHUNOVA, A.

Results of the testing of certain phenols with tartaric acid - ammonia solutions of iron chloride. Uch.zap. MOPI 84:187-189 '59. (MIRA 14:9)

(Phenols)

KORSHUNOVA, A. F.

"Agricultural Measures for the Reduction of the Susceptibility of Seeds to Alternaroise Infection", (On the Sanation of Seeds in Crucifer Culture), Selekts i Semenovod, No. 2, pp 63-65, 1951.

KORSHUNOVA, A. F.

KORSHUNOVA, A. F. "Agricultural Measures for Lowering the Infection of (Crucifer) Seeds with Alternaria," Selektsiia i Semenovodstvo, vol. 18, no. 2, 1951, pp. 63-65. 61.9 Se5

SO: SIRA SI-19-53, 15 Dec 1953

KORSHUNOVA, Anna Fedorovna

[Alternaria in the seed plants of the Brassicaceae] Al'ternariia semennikov ovoshchnykh krestotsvetnykh kul'tur. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1957. 36 p. (MLRA 10:9)
(Vegetables--Diseases and pests)

STEPANOV, K. M.; CHUMAKOV, A. Ye.; KORSHUNOVA, A. F.; KOZYREVA, G. A.

Development of field crop diseases in 1959. Zashch. rast. ot vred. i bol. 5 no.6:41-44 Je '60. (MIRA 16:1)

(Field crops—Diseases and pests)

KORSHUNOVA, A.F., kand.sel'skokhoz.nauk

Measures against the downy mildew of sunflowers. Zashch.rast. ot vred.i bol 5 no.2:20-21 F '60. (MIRA 15:12)
(Russia, Southern—Sunflowers—Diseases and pests)
(Russia, Southern—Mildew)

KORSHUNOVA, A.F., kand.sel'skokhoz.nauk

Root form of corn smut. Zashch. rast. ot vred. i bol. 7 no.7:59 Jl '62. (MIRA 15:11)

1. Starshiy ekskursovod pavil'ona "Zemledeliye" na Vystavke dostizheniy narodnogo khozyaystva SSSR.
(Moscow—Exhibitions)
(Plants, Protection of—Exhibitions)

KORSHUNOVA, A.F., kand. sel'skokhoz. nauk; SHCHEKOCHIKHINA, R.I.

Diagnosis of root rots. Zashch. rast. ot vred. i bol. 9 no.12: 38-40 '64. (MIRA 18:4)

1. Vsesoyuznyy institut zashchity rasteniy.

KHIGEROVICH, M.I.; MERKIN, A.P.; ZUYKOV, G.G.; KORSHUNOVA, A.P.; OSMANOV, N.N.; DUDAK, N.Ya.; MUSATOVA, Z.I., red.

[Improving the properties of cements and concretes by the addition of synthetic products from petroleum chemistry; a contribution to the problems of using chemical resources in construction] Uluchshenie svoistv tsementov i betonov dobavkami sinteticheskikh produktov neftekhimii; k voprosam khimizatsii stroitel'stva. [By] M.I.Khigerovich i dr. Moskva, 1964. 38 p. (MIRA 18:6)

1. Moscow. Inzhenerno-stroitel'nyy institut.

KORSHUNOVA, G.A.

Creatine-creatinine index in urine in poliomyelitis. Zhur.nevr.i psikh. 61 no.3:335-340 '61. (MIRA 14:7)

1. Kafedra nervnykh bolezney (zav. - prof. Ye.F.Davidenkova) Leningradskogo pediatricheskogo meditsinskogo instituta.
(POLIOMYELITIS) (CREATINE) (CREATININE)

Fiber-yielding copolymers. V. S. Klimenkov, E. A. Kulev, A. I. Kuzkhin, V. S. Dyurnbaum, and K. I. Karshunova. U.S.S.R. 106,537, July 25, 1957. Fibers are produced from acrylonitrile and vinyl-base copolymers. To improve their physicomech. and textile-chem. properties methacrylic acid is used as the vinyl monomer.

M. Hosch

L 15043-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6003953 SOURCE CODE: UR/0374/65/000/005/0151/0153

AUTHOR: Beklemishev, D. P. (Leningrad); Gaydamako, M. A. (Leningrad); Korshunova, G. D. (Leningrad); Chernetsov, V. I. (Leningrad)

ORG: none

TITLE: Effect of scale and temperature factors on the impact strength of plastics

SOURCE: Mekanika polimerov, no. 5, 1965, 151-153

TOPIC TAGS: thermosetting material, thermoplastic material, plastic strength, impact strength, temperature factor, mechanical stress, scale factor

ABSTRACT: Experimental investigations of the mechanical characteristics of certain thermosetting plastics show the indubitable effect of scale and temperature factors on the impact strength of plastics. It has been found that the specific impact strength of the AG-4V plastic material increases (up to T=140C) with an increase in temperature and then sharply declines to its value at T=20C when the size of sample taken is one fifth of the State Standard size and when the temperature of heating is increased from 20 to 200C. Under similar conditions the plastic SNK-2-27 manifests directly opposite behavior. The AG-4V plastic is more sensitive both to decrease in size and increase in the temperature of heating. Orig. art. has: 3 figures and 2 formulas. [Based on author's abstract]

SUB CODE: 11 SUBM DATE: 26Apr65/

Card 1/1

UDC: 678:620.178.24

KORSHUNOVA, K.M.

USSR/Cultivated Plants - Grains M-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91634

Author : Petinov, N.S., Korshunova, K.M.
Inst : -
Title : The Role of the Root System in the Productivity of the Corn Leaf Apparatus During Irrigation.

Orig Pub : Fiziol. asteniy, 1957, 4, No 4, 365-371

Abstract : The activity of the root system in Dnepropetrovskaya variety corn with an ample supply of water and mineral substances was studied in comparison with the regular circumstances of cultivation in 1956 under field conditions at Altaiskiy Kray. With irrigation added to fertilization, the corn roots during the entire vegetation yielded 2 - 5 times more connsap than without irrigation. Directly dependent on its uptake is the dry weight accumulation of the above-ground mass. Augmented sap accumulation in the plants during irrigation also causes a more

Card 1/2

Korshunova, K. M.

PETINOV, N.S.; KORSHUNOVA, K.M.

Role of the root system in the productivity of the leaf apparatus of corn grown under irrigation [with summary in English]. Fiziol. rast. 4 no.4:365-371 Jl-Ag '57. (MLRA 10:9)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva Akademii nauk SSSR, Moskva, Biologicheskiy institut Zapadno-Sibirskogo filiala Akademii nauk SSSR, Novosibirsk.
(Corn (Maize)) (Irrigation) (Roots (Botany))

KORSHUNOV, K.M.

PETINOV, N.S.; KORSHUNOVA, K.M.

Productivity of the leaf apparatus in corn grown under irrigation [with summary in English]. Fiziol. rast. 5 no.2:140-146 Mr-Ap '58. (MIRA 11:4)

1.Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR, Moskva (for Petinov). 2.Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk (for Korshunova).
(Corn (Maize)) (Leaves) (Irrigation)

KORSHUNOVA, L.

Cheese

Results of several investigations. Mol. prom. 13, No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952, Uncl.

KORSHUNOVA, L.; VINNIK, I.

Planning to raise the cultural and technical level of workers. Prof.-tekh. obr. 20 no.11:26 N '63. (MIRA 17:1)

1. Chlen metodicheskogo soveta Doma politicheskogo prosveshcheniya Dneprodzerzhinskogo gorodskogo komiteta Kommunisticheskoy partii Ukrainy.

ACC NR: AP7001416 (A) SOURCE CODE: UR/0413/66/000/021/0128/0128

INVENTOR: Korshunova, L. I.

ORG: none

TITLE: A high-transmission objective LIK-1. Class 42, No. 188059

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 128

TOPIC TAGS: lens, optic lens, applied optics, optic element

ABSTRACT: This Author Certificate presents a high-transmission objective LIK-1 with two separate lens components. The first of these consists of two cemented pairs of lenses with a single lens between them. To enlarge the relative aperture, the second component is made up of three separate lenses with air space between them (see Fig. 1).

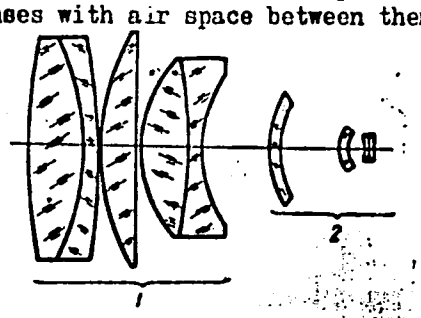


Fig. 1. 1 - first component; 2 - second component

The optical power of these are, respectively: +0.2 to +0.4; +0.7 to +1.0; -1.0 to -2.0 of the optical power of the objective. Orig. art. has: 1 figure.

Card 1/1 SUB CODE: 17/ SUBM DATE: 03Jul65 UDC: 771.351.7

KORSHUNOVA, L.I.

AID P - 551

Subject : USSR/Chemistry

Card 1/1 Pub. 78 - 17/29

Authors : Topchiyev, A. V., Tumerman, B. M., Andronov, V. N. and Korshunova, L. I.

Title : Boron fluoride complexes as catalysts for the alkylation of phenol with olefins

Periodical : Neft. Khoz., v. 32, #7, 65-69, Jl 1954

Abstract : The preparation of several boron fluoride complexes and their use in the alkylation of phenol with olefins is described. The boron fluoride complex with ethyl ether proved to be the most effective of the catalysts investigated. The catalysts are arranged in a series according to their decreasing activity. One chart, 1 table and 5 Russian references (1937-1952).

Institution : None

Submitted : No date

ACC NR: AP6025634 (A) SOURCE CODE: UR/0413/66/000/013/0087/0088

INVENTOR: Korshunova, L. I.

ORG: None

TITLE: A six-element high speed objective lens. Class 42, No. 183425 [announced by the State Optics Institute im. S. I. Vavilov (Gosudarstvennyy opticheskiy institut)]

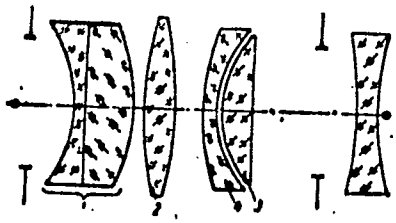
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 87-88

TOPIC TAGS: optic lens, optic element

ABSTRACT: This Author's Certificate introduces a six-element high speed objective lens with entrance pupil extended by 0.3-0.5 times the focal length of the objective. The unit consists of a leading component and a negative lens mounted in front of the image plane. The field of view is increased by making the leading component from five lenses. The first two elements are cemented together to form a negative meniscus with concave surface toward the object and an optical power of 40-50% that of the objective. The third is a positive lens with a power of 0.9-1.0, the fourth is a negative meniscus with concave surface toward the image and a power of 1.1-1.3, and the fifth is a positive lens with a power of 1.5-1.6.

Card 1/2 UDC: 771.351.7

ACC NR: AP6025634



1—negative meniscus with concave surface turned toward the object; 2 and 3—positive lenses; 4—negative mensicus with concave surface turned toward the image

SUB CODE: 20/ SUBM DATE: 16Apr65

Card 2/2

KUTATELADZE, S. S.

L 51275-65 EWP(m)/EPF(c)/EPF(n)-2/EPR/EWT(l)/FCS(k)/EWG(m)/EWA(l) Pd-l/Pr-4/
Pe-4/Pu-4/Pl-4

AM5012942 BOOK EXPLOITATION S/ 7/

Kutateladze, S. S., ed.

Heat and mass transfer and friction in a turbulent boundary layer (Teplomassoobmen i treniye v turbulentnom pogranichnom sloye) Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964. 206 pl illus., biblio. Errata slip inserted. 1000 copies printed. (At head of title: Akadmeiya nauk SSSR. Sibirskoye otdeleniya. Institut teplofiziki) Editor: L. I. Shpakovskaya; Technical editor: Ye. G. Shmakova; Proofreader: L. I. Kershunova

TOPIC TAGS: boundary layer flow, detached flow, friction, heat transfer, incompressible fluid, mass transfer, nonisothermal flow, radiation effect, turbulent boundary layer

PURPOSE AND COVERAGE: This book is a continuation of the monograph by S. S. Kutateladze and A. I. Leont'yev, published in 1962, in which certain properties of the limiting laws of friction and heat transfer in the turbulent boundary layer on a solid were formulated and specific applications of these laws were analyzed. The basic portion of the book was written by Kutateladze and A. I. Leont'yev.

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N. A. Rubtsov was mainly responsible for the development of problems of the inter- [illegible] turbulent boundary layer with radiation. The theory of the flow [illegible] of the region of detachment was developed by M. A. Gol'dshtik. [illegible] prepare the book were N. N. Kirillova, F. P. Mironov, V. A. Mu- [illegible] A. K. Rebrov, V. K. Fedorov, M. V. [illegible]avydova, S. A. Iruzhinin, [illegible] Ye. M. Khabakhpasheva, I. S. Mal[illegible] N. Moskvicheva, and L. S. [illegible]. Professor D. B. Spolding helped in the analysis of certain interesting questions.

TABLE OF CONTENTS:

Card 2/3

L 51475-65

AM5012942

SUB CODE: ME SUBMITTED: 30Oct64 NR REF SOV: 049

OTHER: 070 DATE ACQ: [illegible]

Card 3/3

ACC NR: AP6007692 (A) SOURCE CODE: UR/0413/66/000/003/0071/0071

AUTHOR: Korshunova, L. I.

ORG: none

TITLE: "TAIR" type objective. Class 42, No. 178519

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 71

TOPIC TAGS: optic lens, optic element

ABSTRACT: This Author Certificate presents a "TAIR" type objective containing two components, the second being a positive meniscus concave toward the image. To increase the relative aperture while improving the image quality, the first component is made of three cemented lenses. The first and second lenses are positive and have optical powers of 0.6--0.9 and 0.8--1.0 respectively of the optical power of the whole objective. The third lens is negative and has an optical power of 0.8--1.1.

SUB CODE: 20/ SUBM DATE: 020ct64

Card 1/1

UDC: 535 818.1 535.813.1

(A) (N) L 11163-66 EWT(1)/T IJP(c)

ACC NR: AP6000362 SOURCE CODE: UR/0286/65/000/021/0057/0057

AUTHOR: Korshunova, L. I.

ORG: none

TITLE: Reproduction objective. Class 42, No. 176093

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 57

TOPIC TAGS: optic lens, photographic equipment

ABSTRACT: This Author Certificate presents a reproduction objective consisting of six components (see Fig. 1).

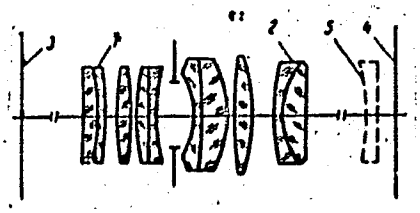

Fig. 1. 1 - First component of objective; 2 - sixth component of objective; 3 - object plane; 4 - image plane; 5 - negative lens.

The first component is a positive meniscus concave toward the object, the second and fifth are individual positive lenses, the third and fourth are negative meniscuses concave toward the image and object respectively, and the sixth is a

Card 1/2 UDC: 535.813.1:771.351.6

L 11163-66

ACC NR: AP6000362

positive lens concave toward the object. To improve the image and to increase the relative aperture of the objective, the first and sixth components are made of two cemented lenses. An air gap can be inserted between the two lenses of the third component. To eliminate curvature of the field occurring with the increase of magnification, a negative lens is placed in the immediate vicinity of the image plane formed by the objective. Orig. art. has: 1 diagram.

SUB CODE: 14/ SUBM DATE: 24Aug64

Card 2/2

KORSHUNOVA, L. M.

"The 'Antique' Liparitida as a Pest of the Siberian Larch." Cand Biol Sci, Leningrad Forestry Engineering Acad, Leningrad, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertation Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

L 6870-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 ASD(m)-3/AFETR RM
ACCESSION NR: AR4041677 S/0081/64/000/007/P020/P021

SOURCE: Ref. zh. Khimiya, Abs. 7P143

AUTHOR: Chkheidze, O. Ya.; Potolovskiy, L. M.; Doladugin, A. I.; Koreshunova, L. N.; Zharov, G. A.

TITLE Polymerization of propylene to obtain a trimeric fraction (nonylenes) as a basic product

CITED SOURCE: Tr. Vses. n.-i. in-t po pererabotke nefti, vy*p. 9, 1963, 228-240)

TOPIC TAGS: polymerization, propylene, trimerization, thermal cracking, oil

TRANSLATION: Trimerization of propylene was produced on experimental installation with catalyst H_3PO_4 on kieselguhr (TU 405 - 51). Propane-propylene fraction of gases of thermal cracking of black oil containing 22 - 26% propylene by weight with additional propane-propylene fraction of gases of kerosene pyrolysis was the raw material. The results of polymerization of propylene in trimers with recirculation

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and without recirculation of dimers are given; the material balances of both processes are compared. Total transformation of propylene and yield of fractions of polymerizate depend comparatively little on propylene content in initial raw material. At 200° total transformation of propylene during change of volume speed from 1.0 to 2.5/hour changes within limits of 88 - 60%; at 220° -- within limits of 92 - 75%. Yield of trimeric fraction at 200° without recirculation of dimers is 30 - 35% (at volume velocity of 2.0 - 2.5/hour); at 220 degrees, other conditions being equal, it is 28 - 32%. Upon returning into the process ~50 - 60% dimers of propylene, transformation of propylene is practically constant (2 - 5% higher than during work without recirculation). During further increase of quantity of recirculate, transformation of propylene is lowered. Maximum quantity of dimer fraction which can be returned into the process for recirculation is 50% for propylene; in this the yield of trimeric fraction (125 - 150°) is ~50% for initial propylene and 60 - 70% for the reacting propylene; this confirms the expediency of carrying out the process at 200°. Yield of trimeric fraction for reacting propylene increases with increase of volume velocity of supply of raw material. During removal of all sulfurous compounds from the initial propane-propylene fraction, the trimeric fraction obtained in process of polymerization

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ACCESSION NR: AR4041677

of propylene satisfies requirements presented to raw material for synthesis of alcohols used as materials for preparation of plasticizer. Under optimum conditions of propylene trimerization, the yield of tetra- and pentamers of propylene is ~50% of yield of propylene trimers.

SUB CODE: OC, GC ENCL: 00

Card 3/3

S/081/62/000/021/059/069
B160/B186

AUTHORS: Kuplenskaya, A. A. Korshunova, M. A.

TITLE: Using electron microscopy for studying the fine structure of printing materials

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 481 abstract 21P308 (Sb. nauchn. rabot. Vses. n.-i. in-t poligr. prom-sti, no. 12, 1960, 55-65)

TEXT: The possibility is discussed of using electron microscope analysis for studying pigments (bronze powder, phthalocyanic pigments, carbon black), and emulsion glues, colloids, the surface of alloys and anti-corrosion coatings. Methods of studying all these materials by electron microscope are selected and described. It is found possible, using this, to determine those changes in the structure of the materials and in the size and shape of particles which have a noticeable effect on the properties and behavior of the materials in technological processes and which cannot be discovered by other known methods of investigation. The effect of plasticizers on the structure of latexes and of acetic acid on the structure of

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S/081/62/000/021/059/069
Using electron microscopy for studying ... B160/B186

polyvinyl alcohol is shown. [Abstracter's note: Complete translation.]

Card 2/2

KORSHUNOVA, N. [Karshunova, N.]

How to correct the speech of stuttering children. Rab.i sial 36 no.2:21 F '60. (MIRA 13:6)

1. Logoped shkol g.Grodna.
(Stammering)